Amended Claims (Attorney Docket No. BHC 031 050)

(Currently amended) Compounds A compound of the formula 1.

$$\begin{array}{c|c}
O \\
CN \\
N \\
R^2
\end{array}$$
(I),

in which

A is phenyl, heteroaryl or a group of the formula

> where phenyl and heteroaryl are optionally substituted by up to 2 radicals independently of one another selected from the group consisting of heteroaryl, halogen, C₁-C₆-alkyl, C₁-C₆-alkoxy, trifluoromethyl, trifluoromethoxy, benzyloxy and benzyl,

> > where C₁-C₆-alkyl is optionally substituted by a group of the formula -NR³R⁴ in which R³ is C₁-C₆-alkyl and R⁴ is hydrogen or C₁-C₆alkoxy (C_1-C_6) alkyl, and

heteroaryl is optionally substituted by C₁-C₆-alkoxy,

 R^1 is C₃-C₈-cycloalkyl, C₁-C₆-alkyl, C₁-C₆-alkoxy(C₁-C₆)alkyl, benzyl or a group of the

formula

where C₃-C₈-cycloalkyl is optionally substituted by hydroxy, C₁-C₆-alkyl or trifluoromethyl,

C₁-C₆-alkyl is optionally substituted by heteroaryl, C₃-C₈-cycloalkyl or hydroxy,

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and benzyl is optionally substituted by C₁-C₆-alkoxy or halogen,

R² is hydrogen,

or

R¹ and R² together with the nitrogen atom to which they are bonded form a 5- to 6-membered heterocyclyl which is optionally substituted by up to 2 substituents independently of one another selected from the group consisting of C₁-C₆-alkyl, hydroxy, cyano, oxo, heteroaryl, benzyl, formyl, C₁-C₆-alkylcarbonyl and one of the following groups

, which are linked via the two oxygen atoms to one

of the carbon atoms in the heterocycle,

 $\label{eq:continuous} where C_1-C_6-alkyl is optionally substituted by hydroxy or heteroaryl, \\$ and the salts, solvates and/or solvates of the salts thereof.

2. (Currently amended) Compounds according to The compound of Claim 1, where



A is phenyl, heteroaryl or a group of the formula

where phenyl and heteroaryl are optionally substituted by up to 2 radicals independently of one another selected from the group $\underline{\text{consisting}}$ of heteroaryl, halogen, C_1 - C_4 -alkyl, C_1 - C_4 -alkoxy, trifluoromethyl, trifluoromethoxy, benzyloxy and benzyl,

where C_1 - C_4 -alkyl is optionally substituted by a group of the formula -NR³R⁴ in which R³ is C_1 - C_4 -alkyl and R⁴ is hydrogen or C_1 - C_4 -alkoxy(C_1 - C_4)alkyl, and

heteroaryl is optionally substituted by C₁-C₄-alkoxy,

 R^1 is C_3 - C_6 -cycloalkyl, C_1 - C_4 -alkyl, C_1 - C_4 -alkoxy(C_1 - C_4)alkyl, benzyl or a group of the

where C_3 - C_6 -cycloalkyl is optionally substituted by hydroxy, C_1 - C_4 -alkyl or trifluoromethyl,

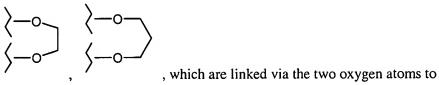
 C_1 - C_4 -alkyl is optionally substituted by heteroaryl, C_3 - C_6 -cycloalkyl or hydroxy,

and benzyl is optionally substituted by C₁-C₄-alkoxy or halogen,

R² is hydrogen,

or

R¹ and R² together with the nitrogen atom to which they are bonded form a 5- to 6-membered heterocyclyl which is optionally substituted by up to 2 substituents independently of one another selected from the group consisting of C₁-C₄-alkyl, hydroxy, cyano, oxo, heteroaryl, benzyl, formyl, C₁-C₄-alkylcarbonyl and one of the following groups



one of the carbon atoms in the heterocycle,

where C_1 - C_4 -alkyl is optionally substituted by hydroxy or heteroaryl, and the salts, solvates and/or solvates of the salts thereof.

3. (Currently amended) Compounds according to The compound of Claims 1 and 2, where

A is phenyl, thienyl or a group of the formula

where phenyl and thienyl are optionally substituted by up to 2 radicals independently of one another selected from the group $\underline{\text{consisting}}$ of pyridyl, fluorine, chlorine, bromine, C_1 - C_4 -alkyl, C_1 - C_4 -alkoxy, trifluoromethyl, trifluoromethoxy, benzyloxy and benzyl,

where C_1 - C_4 -alkyl is optionally substituted by a group of the formula -NR³R⁴ in which R³ is C_1 - C_4 -alkyl and R⁴ is hydrogen or C_1 - C_4 -alkoxy(C_1 - C_4)alkyl, and

pyridyl is optionally substituted by C₁-C₄-alkoxy,

R¹ is C_3 - C_6 -cycloalkyl, C_1 - C_4 -alkyl, C_1 - C_4 -alkoxy(C_1 - C_4)alkyl, benzyl or a group of the

formula
$$H_3C$$
 CH_3

where C_3 - C_6 -cycloalkyl is optionally substituted by hydroxy, C_1 - C_4 -alkyl or trifluoromethyl,

 C_1 - C_4 -alkyl is optionally substituted by pyridyl, C_3 - C_6 -cycloalkyl or hydroxy, and benzyl is optionally substituted by C_1 - C_4 -alkoxy, fluorine, chlorine or bromine,

R² is hydrogen,

or

R¹ and R² together with the nitrogen atom to which they are bonded form a 5- to 6-membered heterocyclyl selected from the group of pyrrolidinyl, piperidinyl, piperazinyl and morpholinyl, which is optionally substituted by up to 2

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substituents independently of one another selected from the group consisting of C₁-C₄-alkyl, hydroxy, cyano, oxo, heteroaryl, benzyl, formyl, C₁-C₄-alkylcarbonyl and one of the following groups

, which are linked via the two oxygen atoms to one of the carbon atoms in the heterocycle,

where C_1 - C_4 -alkyl is optionally substituted by hydroxy or pyridyl, and the salts, solvates and/or solvates of the salts thereof.

4. (Currently amended) Compounds according to Claims 1, 2 and 3 The compound of Claim 1, where



A is phenyl, thienyl or a group of the formula

where phenyl is optionally substituted by up to 2 radicals independently of one another selected from the group <u>consisting</u> of pyridyl, fluorine, chlorine, methyl, methoxy, ethoxy, trifluoromethyl, trifluoromethoxy, benzyloxy and benzyl,

where methyl is optionally substituted by a group of the formula $-NR^3R^4 \ \text{in which} \ R^3 \ \text{is methyl and} \ R^4 \ \text{is hydrogen or 2-methoxyethyl},$ and

pyridyl is optionally substituted by methoxy,

R¹ is C₃-C₆-cycloalkyl, methyl, ethyl, propyl, 2-methoxyethyl, benzyl or a group of the

where C_3 - C_6 -cycloalkyl is optionally substituted by hydroxy, methyl or trifluoromethyl,

methyl, ethyl, propyl is optionally substituted by pyridyl, cyclopropyl or hydroxy,

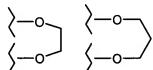
and benzyl is optionally substituted by methoxy, ethoxy, fluorine or chlorine,

R² is hydrogen,

or

R¹ and R²

together with the nitrogen atom to which they are bonded form a 5- to 6-membered heterocyclyl selected from the group of pyrrolidinyl, piperidinyl, piperazinyl and morpholinyl, which is optionally substituted by up to 2 substituents independently of one another selected from the group consisting of methyl, ethyl, propyl, tert-butyl, hydroxy, cyano, oxo, pyridyl, benzyl, formyl, methylcarbonyl, ethylcarbonyl, propylcarbonyl and one of the following groups



, which are linked via the two oxygen atoms to one

of the carbon atoms in the heterocycle,

where methyl, ethyl and propyl are optionally substituted by hydroxy or pyridyl,

and the salts, solvates and/or solvates of the salts thereof.

5. (Currently amended) Process for preparing compounds of the formula (I), characterized in that either

[A] a compound of the formula

$$H_3C$$
 CN
 CH_3
 CH_3
 CH_3

is initially converted with a compound of the formula

 HNR^1R^2 (III),

in which

R¹ and R² have the abovementioned meanings <u>as defined in Claim 1</u>, at elevated temperature in an inert solvent or else in the absence of a solvent into a compound of the formula

$$H_3C$$
 CN
 H_3C
 S
 N
 R^2
 (IV)

in which

R¹ and R² have the abovementioned meanings as defined in Claim 1,

and the latter is then reacted in an inert solvent in the presence of a base with a compound of the formula

$$NH$$
 NH_2
 $X = CI, Br or I$
 (V)

in which

A has the abovementioned meanings as defined in Claim 1,

or in a modified sequence of the reactants

[B] a compound of the formula (II) is initially converted with a compound of the formula (V) in an inert solvent in the presence of a base into a compound of the formula

in which

A has the abovementioned meanings as defined in Claim 1, and the latter is then reacted at elevated temperature in an inert solvent or else in the absence of a solvent with a compound of the formula (III),

and the compounds of the formula (I) resulting in each case are reacted where appropriate with the appropriate (i) solvents and/or (ii) bases or acids to give their solvates, salts and/or solvates of the salts.

- 6. (Cancelled).
- 7. (Original) Medicament comprising at least one of the compounds according to any of Claims

 1 to 4 and at least one pharmaceutically acceptable, essentially non-toxic carrier or excipient.
- 8. (Cancelled).
- 9. (Cancelled).
- 10. (Cancelled).
- 11. (Currently amended) Method for controlling A method for treating impairments of perception, concentration, learning and/or memory in humans or animals by comprising

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administering to a human or animal in need thereof an effective amount of the compounds from at least one compound of any of Claims 1 to 4.

12. (Currently amended) Method according to The method of Claim 11, where the impairment is a consequence of Alzheimer's disease.